

CENTER FOR ADVANCED COMBUSTION CONTRACT AMOUNT: \$500,000
ENGINEERING RESEARCH

L. Douglas Smoot, Brigham Young University

The main focus is on development of new combustion technology that will improve the U.S. competitive position in the international market, with an emphasis toward the clean and efficient use of low-grade fossil fuels, particularly coal.

<u>Matching Funds:</u>	<u>In-Kind</u>	<u>Cash</u>
<u>Source</u>		
Advanced Fuel Research Inc.		\$ 2,000,000
Air Force		150,000
Angus Chemical		30,435
Babcock and Wilcox		49,678
Chevron Research		25,000
Combustion Engineering Inc.		65,000
Consolidation Coal		65,000
Convex Computer Corp.		75,000
Coordinating Research Council		40,000
Corning Glass Works		25,000
Dow Chemical USA		25,000
Electric Power Research Institute		132,429
Empire State Electric Energy		331,040
EPA		274,314
Foster Wheeler Corporation		49,678
Gas Research Institute		75,000
Gas Research Institute (2nd Contract)		238,150
General Electric Corporation		25,000
General Motors Corporation		25,000
Idaho National Engineering Lab		25,000
Los Alamos National Laboratory		62,294
Morgantown Energy Technology Center		1,041,432
National Institute of Health		127,186
National Science Foundation		9,700,000
National Science Foundation (Grant #2)		77,219
Pittsburgh Energy Technology Center		165,537
Pratt & Whitney		23,503
Pyropower Corporation		25,000
Questar Corporation		25,000
Shell Development		25,000
Southern California Edison Co.		25,000
Tennessee Valley Authority		82,769
TRW		25,000
Utah Power & Light		172,362
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	TOTAL	\$15,303,026

Companies Associated Since Contract (14)

Convex Computer Corporation
Gas Research Institute
General Electric Corporation

Chevron Research
Corning Glass Works
Dow Chemical USA
Idaho National Engineering Lab
General Motors Corp.
Pyropower Corp.
Questar Corp.
Shell Development
Southern California Edison
TRW Inc.
Los Alamos National Laboratory

In-State Industrial Associations:

Combustion Lab
Eyring Research Institute
Hercules Inc.
Questar Development
Utah Power & Light

Out-of-State Associations:

Advanced Fuel Research Inc.
Allison Gas Turbine
ANL
Babcock and Wilcox
Battelle Memorial Institute
Bertin and Cie (France)
British Gas Corporation
Chevron Research Co.
Coen Company
Combustion Engineering Inc.
Conoco Coal & Chemicals Co.
Convex Computer Corp.
Corning Glass Works
DOE/MEIC
DOE/PETC
Dow Chemical USA
Electric Power Research Institute
Empire State Electric Energy
Energiteknisk Utveckling (Sweden)
EPRI
EVI
Exxon
Eyring Research Institute
Foster Wheeler Corporation
Gas Research Institute
General Electric Co.
Harwell
Hercules
Hitachi America Ltd.
IHI Heavy Industries
IRSID
Kaiser Coal Corporation

Kobe Steel (Japan)
 Laboratoires du Cherchar (France)
 LANL
 Los Alamos National Laboratory
 MIT
 Mt. Energy Resources
 Morgantown Energy Technology Center
 NASA
 NRRI
 Nuclear Technical Services
 Phillips Petroleum Co.
 Pittsburgh Energy Technology Center
 Questar Development Corp.
 Research Institute (Sweden)
 Rockwell International
 Sandia National Laboratories
 Shell Development
 Southern California Edison Company
 Standard Oil
 Tennessee Valley Authority
 Utah Power & Light
 Wayne State University

Center for Advanced Combustion Research Contract #87-0350

<u>Payments:</u>	<u>Amount</u>	<u>Balance</u>
01 May 86	\$500,000	-0-

Total Payments: \$500,000

CENTER FOR COMPUTER INTEGRATED MANUFACTURING (Sub-Contract From USU in the amount of \$132,000)
 Dell K. Allen, Brigham Young University

The main focus is on development and application of software, hardware, and courseware, required for manufacturing systems integration; including software for variant and generative process planning, knowledge-based systems, electronic component selection and a shop-floor data collection system.

<u>Matching Funds:</u>	<u>In-kind</u>	<u>Cash</u>
<u>Source</u>		
Hewlett Packard		15,000
DCLASS Software Royalties		9,600
Avco Lycoming		125,555
Avco Lycoming		40,000
Autodesk	\$1,000	
Textron Lycoming		160,000
	Subtotals	\$350,155
	TOTAL	\$351,155

Companies Associated Since Contract (8)

Berrett Consulting
 Infoquest
 Visher
 Hewlett Packard
 Avco Lycoming
 Reliance Electric
 Autodesk Inc.
 Textron Lycoming

In-State Industrial Associations:

Berrett Consulting
 Boeing
 Cam Software Inc. *
 Caterpillar
 Cessna Aircraft
 Clark Equipment
 CTC*
 Digital and Management Technologies Inc.
 EchoSystems
 E-Soft
 Evans & Sutherland Corp.
 Infoquest
 Morton-Thiokol
 MTI
 Raytheon
 Smartware*
 Tolman Engineering